

A Home for Heroes: The Incredibles Domestic Design.

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Abstract

In the animated film *The Incredibles* (2004) a dysfunctional family of superheroes is forced to go undercover and to refrain from practising heroic deeds and demonstrating their special powers. In an attempt to give it the image of normalcy this fictional family is placed within a stylishly designed modernist home filled with 1950s furniture, futuristic appliances and pastel colours and located in suburbia somewhere in North America. Deprived of doing what they really love this imposed lifestyle becomes quite frustrating for them. Inevitably, behind closed doors, in this fashionably designed domestic environment their special powers are occasionally expressed in mundane situations such as doing the housework, attending school or participating in the family dinner. This paper examines the design and animation process involved in the construction of this private living space and its links to the imaginary world of comic books and superheroes. The thinking on animation and design theorists such as Cholodenko, Clark, Furniss, Buchanan, Margolin and Csikszentmihalyi is applied to this scenario in particular and to animation in general and a wider argument for the placement of animation within Film Studies is also enunciated.

Paper

I am very pleased to talk about animation at a scholarly gathering. For years animation has been considered a bastard offspring of the cinema even within the discipline of Film Studies when a case can clearly be made, by Cholodenko¹, that film is really the child and animation the parent by virtue of the historical precedence of Emile Reynaud's

screenings of projected drawings, not photographs, to a public audience prior to the Paris screenings of films by the Lumiere brothers. Quoting Cholodenko:

In neglecting animation, film theorists-when they have thought about it at all-have regarded animation as either the 'step-child' of cinema or as not belonging to cinema at all, belonging rather to the graphic arts. In the former case film theory still sees animation as a form of film, albeit its most inferior form, as child to live action's adult form. In the latter case, it would no longer be possible to speak of animation as the most neglected form of film nor to attribute any responsibility for that neglect to the discipline of Film Studies. If one may think of animation as a form of film, its neglect would be both extraordinary and predictable. It would be extraordinary insofar as a claim can be made that animation film not only preceded the advent of cinema but engendered it; that the development of all those nineteenth century technologies-optical toys, studies in persistence of vision, the projector, the celluloid strip, etc-but for photography was to result in their combination/ synthesizing in the animatic apparatus of Emile Reynaud's Theatre Optique of 1892; that, inverting the conventional wisdom, cinema might then be thought of as animation's 'step-child'. (Cholodenko, 1991: 9-10)

This seems like a reasonable assertion but one that would require a considerable rethinking of cinema history. In any case in contemporary cinema animation is claiming a substantial role within live-action film through its visual effects and creation of synthetic characters and environments. This has particular resonance in the fantasy film. In *Harry*

Potter and the Philosopher's Stone (2001) for example, Harry and his classmates confront and fight a troll in the girls' toilet. That the troll exists and engages in a convincing struggle with the children is testament to the creditable design and construction of this imaginary creature by three dimensional digital animation means. Similar use of animated visual effects can be found in many other films, helping to create imaginary worlds in a realistic and believable style in support of the live-action cinema paradigm. Here, animation is slave to this form of cinema.

Animation has been labelled a technological novelty, a trick film, a gimmick of amusement, even today in its 3D digital form. For a long time it has also been called 'kids stuff' or entertainment for children. But in this current period of television series featuring dysfunctional families and communities such as *The Simpsons*, *South Park*, *King of the Hill*, *Beavis and Butthead* and *Family Guy* and the dramatic and uplifting films of Studio Ghibli such as *Grave of the Fireflies*, *Princess Mononoke*, *Howl's Moving Castle* and *Spirited Away* there are many arguments for a reappraisal of the medium and its perceived position within Film and Cinema Studies. To point further to animation's neglect I need only cite Deleuze's acclaimed writing on film. In two books *Cinema 1: The Movement-Image* and *Cinema 2: The Time-Image*, a total of 595 pages, only one paragraph is devoted to animation, and it is a short one at that.²

In this paper I have followed the suggestion of animation theorist Maureen Furniss in adopting a contextual approach to the study of animation research by examining the context in which the film was produced, thus my references to other disciplines of

Cinema, Film Studies, Comics, Architecture and Design, as these all have a bearing on the film under discussion here, *The Incredibles* (2004). It falls within several categories and classifications and cuts across these disciplines. It is an example of 3D digital animation technology. It is a film appearing in the cinema and an item of popular culture. It also acts as a promotional/production documentary program on television. It is aimed at family audiences, children as well as adults. It features a dysfunctional family. It deals with aspects of design including architecture.³ It refers to the medium of comics here converted to cinema in its focus on superheroes. And of course it is an animation produced by Pixar, an emerging force in digital film production, taking its place in the cinema and on DVD alongside other animations such as *Wallace and Gromit* (2005), *Howl's Moving Castle* (2004) and *Corpse Bride* (2005).

This contextual and multi-focus approach to a topic or an issue is also common in design practice where a range of considerations is examined from the context to the role of the user, in this case the design of a domestic environment for a family of superheroes. In writing about the solution of design problems Buchanan has discussed separate areas of design such as industrial and interior design and visual communication but argues that despite the different categories of design all designers share a similar work process. He theorises about this and what he calls the indeterminant aspect, a thing he labels its 'wicked' problem:

Design problems are "indeterminate" and "wicked" because design has no special subject matter of its own apart from what a designer conceives it to be.⁴ The subject matter of design is potentially universal in scope, because design thinking may be applied to any area of human experience. But in the process of application,

the designer must discover or invent a particular subject out of the problems and issues of specific circumstances. This sharply contrasts with the disciplines of science, which are concerned with understanding the principles, laws, rules or structures that are necessarily embodied in existing subject matters...design functions as an integrative discipline. By using placements (by which he means the contextual and conceptual space in which the designer operates) to discover or invent a working hypothesis, the designer establishes a principle of relevance for knowledge from the arts and sciences, determining how such knowledge may be useful to design thinking in a particular circumstance without immediately reducing design to one or other of these disciplines. In effect, the working hypothesis that will lead to a particular product is the principle of relevance, guiding the efforts of designers to gather all available knowledge bearing on how a product is finally planned. (Buchanan, 1992: 16-18)

In this instance and in this scenario, the designers not only need to know about the superheroes, the intended users of the design, but also about the impact of these users on the design and their need for secrecy. To this end, the street facing exterior of the front of the house has high walls with short windows on top to provide privacy and security in a seemingly friendly but nevertheless fortress like frontage. The 1950s architectural style looks back to the *Golden Age*⁵ of comic book superheroes that is celebrated in the film and forward to the Modernist influence. In terms of the interior of the house the family has stylish design sensibilities. It fits the 1950s approach of a family living in a consumer-oriented society in a Modernist house within an increasingly complex technological world.

Margolin adopts the user studies approach to design. He has studied the relationship between products and their users and has called for designers to become better informed of what he refers to as the product environment rather than to limit attention to a product's appearance and functionality:

The increasing number of tasks that products can manage prompts the designer to shift radically from the traditional focus on form to the more flexible relation between the product and the user. The designer can no longer foresee all the ways that complex products will be used and must think in terms of multiple possibilities rather than a limited number of set functions. (Margolin, 1988: 60)

There is an example of this in *The Incredibles* when the mother uses the kitchen sink as a bathtub for her baby whilst talking on the wall phone to her husband at the office, and when the hair dryer is used to dry the pages of the wet books.

This behaviour by users of products has been analysed in a study of the psychological significance and meaning of household objects by the psychologist Csikszentmihalyi. He researched the effects of objects on users and their role in bringing order to the user in daily life and found that:

each home contained a symbolic ecology, a network of objects that referred to meanings that gave sense to the lives of those who dwelt there...the most frequently mentioned special object in the home was some kind of furniture...it was not the design quality of the piece that made it special, but what the person did with it, and what the interaction meant to the person. Because different people have

different goals and do different things, the kinds of objects cherished and the reasons why they were special varied dramatically by age and sex. The youngest generation of the families interviewed chose stereos, television sets, furniture, musical instruments, and their own beds, in that order. Their parents most often chose furniture, graphic arts, sculpture, books, and musical instruments; while their grandparents' chose photographs, furniture, books, television sets and graphic arts. It was clear that the younger generations responded to the activity potential of the objects-to what they could do with them, while the older generations turned to things that evoked contemplation, or preserved the memories of events, experiences and relationships...(these) objects do not create order in the viewer's mind by embodying principles of visual order; they do so by helping the viewer struggle for the ordering of his or her own experience. (Csikszentmihalyi, 1991: 27-29)

The father of the family, Bob Parr, has a den in which he keeps collections of materials from his past life as a super-hero. Here the work of Csikszentmihalyi is relevant as this collection falls within the dominant categories of the research findings for Parr's age grouping of furniture and graphics and in the emotional attachment he displays to these. Consequently he then proceeds to question whether it matters what an object looks like if it doesn't create order and this has implications in the design of objects when we consider the aspects of form, colour, texture and materiality etc. and the fact that for years the appearance of products has been a prime concern to designers even though a user may prefer kitsch to originality. These concerns have evolved to considerations of the shape in relation to functionality through ergonomics and the impact of the product on the user to studies of communication and the instructional information stored on or in the product

about its use. In any case the thought of a family of superheroes using their product designs would be a terrifying thought to most designers because of the degree of testing to extreme levels it would bring to their designs. Examples of this are demonstrated in the film in the scene when the father is able to cut right through ceramic plate that normally functions as a cutting board or base, or the scene in which he leaves the imprint of his fingers in the roof of the car after grabbing it for support. In the film the product design works to express the character's emotions as in the scenes of the huge father driving in the tiny, cramped car that acts as a metaphor for his repressive role at Insuricare.

The Incredibles was released in late 2004. It is a fully animated 3D digital film and as such nothing existed prior to production. Everything had to be designed and digitally constructed then animated and rendered. As the Supervising Technical Director Rick Sayre commented:

The big challenge of this film is that there was no single big challenge-it was the entire film! One of the counter intuitive things about working in the computer is that the level of effort it takes to have the Parr family sit down to dinner is comparable to having Bob pick up a bus and throw it through a wall. Even when it's not an incredible effect, it's always an amazing illusion. (Sayre in Vaz, 2004: 33).

What he is referring to here is that even the simple things like a wrinkles in a shirt or the movement of a character's hair required complex solutions of design and digital animation production.

Not only does the film feature a portrayal of superheroes it represents them as a family unit, the Parrs, two parents and three children, and at home. They have no pets. The family theme is a strong one throughout the film that has been called a family genre movie and in this case the family are dysfunctional. The film's director Brad Bird had years of experience working with a fictional dysfunctional animated family as Executive Consultant and occasional director of *The Simpsons*. In an interview I had with him in Sydney I asked him to describe this experience:

I dabbled in a lot of different areas and kind of made a lot of criticisms and suggestions, most of which they took, and I think that when they first brought me on the show they liked a thing that I had done for Steven Spielberg's *Amazing Stories* called *Family Dog* and liked the fact that even though the world was very stylised the film-making was more like live-action in that there were extreme camera angles and longer takes which were unusual for TV animation at that time. Since *The Simpsons* a lot of people have opened up that and it's been copied. We had to move quickly and that you cannot linger over decisions when you're doing 22 to 24 episodes a year. It's literally like those episodes of *I Love Lucy* where she's on the conveyor belt and anytime you stop on any one thing other things start to pile up so these were intricate stories. They all had beginnings, middles and endings and having been there for something like 160-180 of them I learned to anticipate trouble early and to trust gut instinct a lot. (Brad Bird interview, 2004)

This represents another insight into the methodology of animators in the reliance on instructional responses and what animators refer to as 'muscular memory.' The narrative of the film begins with the earlier single superhero based lives of Mr.Incredible and Elastigirl including their wedding then moves forward to a time when they have been retired or discharged from their superhero duties and are attempting to live like a normal family with their children in the suburbs. The Parr family consists of Bob Parr (Mr. Incredible), Helen Parr (Elastigirl) and their three children Violet, Dash and Jack-Jack. Each of the children has genetically inherited super powers though different from their parents.

The design of the characters for the film, executed by Tony Fucile, of aging superheroes past their prime, reflects their special powers. The father, Bob, is strong and physical, an ex-football player so his physique, though aging complete with pot belly and bald patch, is that of a strong man. His wife, Helen, Elastigirl, is a variant of a superhero from comic book history as Clark explains:

Jack Coles introduced Plastic Man in 1941. His power was based on his ability to mold his body into any shape to fit any situation, to morph himself into anything and anyone. The same transformative ability of art, comics, graphic novels and zines- which continually morph into new and hybrid forms-can reveal to us new aspects of ourselves and our world. (Clark, 2002: 42).

The reference to comics, the domain of superheroes is appropriate here, as comics, like animation, are perceived generally in the family of media as having 'poor relation' status.

Helen is the wife who has to stretch in many directions to keep her children from fighting and to manage the household. Her teenage daughter Violet doesn't like being looked at or touched so she can make herself invisible or surround herself with an impenetrable force-field. Violet's young brother Dash is bursting with repressed energy and his special power is the ability to move with enormous speed. Baby brother Jack-Jack, at his physiological development stage is undeveloped and so has not yet demonstrated any superhero powers.

There are several scenes in the film set in the family home: exterior, drive-way, garage, living room, dining room, bedroom and den. The design of the house combines a past/future look having a 1950s Modernist style architecture incorporating a simpler and less decorative approach to form with some 1960s concepts of the future in the design of the appliances and the large screen television and a robot toy, 1950s style, modern and abstract art and images and furniture, pastel colours. There is an emphasis on home wares, an area of domestic design that emerged around this time. You can almost smell the Tupperware. It is clean and sanitised. There is what looks like a Jacobsen chair in the living room and Charles Eames style twisted plywood chairs in the dining room. If we look at some of the design for the house and its interiors we can note the use of natural materials and organic forms. It has a most uncluttered look for a family home, nowhere near as minimal as the interiors of Edna mode's home though. Although we don't get to

see the laundry we can imagine that the detergent would be called 'super wash' or something like that and there would be super strength cleaners and detergents.

If this is an attempt to pass off the Parr's as normal then it doesn't succeed as it has the appearance of a home whose owners have impeccable and current design sensibilities. On the other hand, their dysfunctional behaviour of arguing over dinner could be perceived as normal despite their non-normal status. When a fight breaks out at the dinner table the super powers are unleashed. The mother stretches her arms to keep Violet and Dash apart, Dash runs at high speed around the room and Violet blocks him by erecting a force field.

The design of the film is deceptive in its live-action film style coverage of the characters and their actions. I asked Bird about how his approach developed.

The traditional Disney method of storyboarding which 98% of the industry works in for animation is to use animation to figure out the business- what characters are doing and it's a way to block the action of characters. I am much more willing to expend extra resources than the storyboard to make them more cinematic, to actually use programs like After Effects to mock camera moves through space and I spend more money and resources on getting my storyboards to be very visual and very elaborate because I feel like if I cannot try things and if I'm going to make a mistake I want to make it in the cheap part of the process. And so by the time we get to the expensive part I will have explored a lot of stuff already. I don't wait for camera angles. I get camera angles in early because that's the way I think and I

hire storyboard supervisors who are into the language of film and really planning out shots and so things are pretty well planned out before they get into production.

The genre of the film is difficult to determine as it crosses several categories being a family film, an action film, a comedy, and an animated film. Bird's response to this was informative:

I think that animation is a very versatile medium that can tell any story. I think that it's mistakenly called a genre and it's not. It's a medium that can express any genre and I'm enjoying the fact that people's perceptions of it are finally opening up. (Brad Bird interview, 2004)

Whether this eventuates or not it brings us back to the point we started and the placement of animation within the world of film. According to Bird animation can behave like all of film's genres. As film's step-child it has already developed considerably in its 113 year old history and yet remains young with considerable development to undertake. Ultimately it looks capable of outliving the entire film family.

End Notes

1. In both his chapter “Who Framed Roger Rabbit, or The Framing of Animation” pp. 212-214, and in the Introduction to the book Cholodenko, Alan (ed.) (1991) *The Illusion of Life: Essays On Animation*, Power Publications, Sydney, Cholodenko raises this interesting and novel notion by arguing the case for animation to be considered not as a form of film or cinema but rather for film and the cinema to be thought of as forms of animation.
2. In the first volume of his two-volume study of the cinema, *Cinema 1: The Movement-Image*, Deleuze refers (p.5) ever so briefly to the cartoon film.
3. In fact a similar debate to animation’s position within Film Studies could be developed between Architecture and Design. This is all slowly changing and I’m sure that if Vasari were alive today he’d be writing about the lives of animators and designers as well as painters, sculptors and architects. What is useful to designers about architects is their understanding of structure, and this has a bearing on product design, interior design, graphics and animation.
4. Buchanan’s notion of ‘wicked and indeterminate’ design problems implies that both problems and solutions may be difficult to formulate and to solve having potentially multiple explanations and solutions.
5. According to Duin and Richardson, in the history of comics the *Golden Age* refers to the period from the advent of superheroes in 1938 till the end of the first wave in 1949.

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Films

Corpse Bride (2005) dir. by Tim Burton.

Harry Potter and the Philosopher's Stone (2001), dir. by Chris Columbus.

Howl's Moving Castle (2004), dir. by Hayao Miyazaki.

The Incredibles (2004), dir. by Brad Bird.

Wallace and Gromit (2005), dir. by Nick Park.

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